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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

NGUYEN, THUKHANH T

ART UNIT PAPER NUMBER

1722

DATE MAILED: 05/30/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/655,134

Applicant(s)

BENKOFKSKE ET AL.

Examiner

Thu Khanh T. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) 1-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 10-11, 16-21, 26-28, and 30-34 are again rejected under 35 U.S.C. 102(b) as being anticipated by Osada et al (5,507,633).

Osada et al teach a resin molding apparatus comprising an upper and a lower mold plate (7, 8) with a first and a second mold cavity portions (10, 20), heaters (5, 6, 21) embedded in the upper and lower mold, means for pressing the upper and lower mold plate (31, 34; col. 17, lines 22-31), a plurality of ejector pins (22a, 65) mounted on a separate ejector plates (12, 22), a vacuum source (col. 12, lines 34) for providing the vacuum in the cavities during the molding process (col. 12, lines 13-19).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 12-15, 22-25, 29 and 35-37 are again rejected under 35 U.S.C. 103(a) as being unpatentable over Osada et al ('633) as applied to claims 10-11, 16-21, 26-28, and 30-34 in view of Swanson (4,751,029).

Osada et al disclose a molding apparatus as applied above, but fail to disclose a temperature sensor to control the heating temperature of the mold plates and a portion of the mold cavity are formed from steel coated with Teflon.

Swanson discloses an apparatus for molding thermoplastic material, comprising a mold made of steel (col. 5, lines 60-62), a mold cavity having a dam (38) made of Teflon (col. 6, lines 22-24) for wear resistant, and a plurality of thermal sensors for automatically controlling the heating of the mold plates (col. 8, lines 47-52).

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify Osada et al by providing a plurality of thermal sensors and a mold cavity having mold parts made of steel and Teflon coated as taught by Swanson, because the thermal sensors would facilitate the temperature control of the mold plate, while the mold parts made of steel is to improve thermal conductivity and the Teflon coating is to reduce friction and improve wear resistant to the mold parts.

Response to Arguments

5. Applicant's arguments filed March 18, 2003 have been fully considered but they are not persuasive.

6. Regarding to Osada reference, the Applicant argues that it fails to disclose a preform being compressed between the mold plates. However, The preform is part of the product and not

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a structure of the machine. This is the intended use of the molding machine. In response to applicant's argument that Osada fails to disclose a preform is compressed into a molded plate, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

In regard to the §103 rejection by Osada and Swanson, the Applicant asserts that the examiner has fails to establish a prima facie case of obviousness as set forth in the MPEP. The examiner respectfully disagrees. First, at the time the Applicant's invention was made, one of ordinary skill in the molding art would have the knowledge to insert thermocouples or sensors to monitor and control the heating or cooling of the mold, regardless of the heating or cooling method. Further, one of ordinary skill would also have the knowledge that steel is one of the most popular material being use for making a mold, and Teflon coating has also widely used in the molding art to facilitate the removal of the product from the mold for its non-stick property and to improve wear resistant to the mold surface for its hardness. Second, there would be a reasonable expectation of success to improve Osada's apparatus by inserting thermal sensors for controlling the delivery of the heat and measuring the temperature of the mold and terminating the application of heat when the desired temperature has been attained as taught by Swanson (col. 8, lines 47-52). The steel mold and the Teflon coating can only enhance the performance of

Osada's mold, and would highly expect to be success. Finally, the combination of Osada and Swanson does disclose all the claimed features of the current invention.

In regard to the preform that being compressed in between the mold plates, this is again the intended use of the apparatus and does not have any or little patent weight on the apparatus claims.

The Applicant's has commented that Swanson only teach a dam in a mold cavity having a Teflon coating and that aluminum alloy is preferred over steel for making the mold due to its low pressure molding technique. The dam is part of the mold cavity and contacts the molding article during the molding process; thus, it would have been obvious to provide the entire mold surface with Teflon coating for wear resistance. Although the mold could be made of steel or aluminum alloy as taught by Swanson, it would have been obvious to one of ordinary skill in the art to select proper material depending on the molding technique and material.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Khanh T. Nguyen whose telephone number is 703-305-7167.

The examiner can normally be reached on Monday- Friday, 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L Walker can be reached on 703-308-0457. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

TN
May 23, 2003


ROBERT DAVIS
PRIMARY EXAMINER
GROUP 1300-1722

5/29/03